



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: §
Mordechay BEYAR et al. §
Serial No.: 10/561,124 § Confirmation No.: 6535
Filed: June 15, 2006 § Group Art Unit: 3774
For: Deformable Tools And Implants §
Examiner: Paul B. PREBILIC § Attorney Docket: 35033

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

REQUEST FOR CORRECTED FILING RECEIPT

Attached is an annotated copy of the Official Filing Receipt dated August 22, 2006 for the above-referenced Application for which issuance of a Corrected Filing Receipt is respectfully requested.

- 1) There is an error with respect to *Domestic Priority data* field, please correct as follows:

Domestic Priority data as claimed by applicant

This application is a 371 of PCT/IL2004/000527 06/17/2004
which claims benefit of 60/478,841 06/17/2003
and claims benefit of 60/529,612 12/16/2003
and claims benefit of 60/534,377 01/06/2004
and claims benefit of 60/554,558 03/18/2004
and is a CIP of 09/890,172 07/25/2001
and is a CIP of 09/890,318 07/25/2001 PAT 7,097,648

- 2) There is an omission with respect to *Foreign Applications* field, please add as follows:

Foreign Applications

ISRAEL 160987 03/21/2004

REMARKS

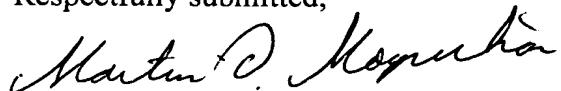
The present Application is a National Phase of PCT Application No. PCT/IL2004/000527, filed on June 17, 2004, which claims the benefit under §119(e) of U.S. Provisional Application No. 60/478,841, filed on June 17, 2003, U.S. Provisional Patent Application No. 60/529,612, filed on December 16, 2003, U.S. Provisional Patent Application No. 60/534,377, filed on January 6, 2004, U.S. Provisional Patent Application No. No 60/554,558, filed on March 18, 2004 and Israel Patent Application No. 160987, filed on March 21, 2004. The present Application is also a Continuation-In-Part (CIP) of U.S. Patent Application No. 09/890,172 and U.S. Patent Application No. 09/890,318, both filed on July 25, 2001. Earlier PCT Patent Application No. PCT/IL2004/000527 has not been fully entered, i.e. should read "PCT/IL2004/000527" (instead of "PCT/IL04/00527"). Earlier U.S. Provisional Patent Applications Nos. 60/529,612, 60/534,377 and 60/554,558 as well as U.S. Patent Applications No. 09/890,172 and 09/890,318 should be added to the *Domestic Priority data* field. Earlier Israel Patent No. 160987 should be added to the *Foreign Applications* field. See attached copy of the Preliminary Amendment (amending "Related Applications" section, see page 2 of such document) as well as Application Data Sheet as originally-filed with the above-referenced US National Phase Patent Application No. 10/561,124.

Attached is also an annotated copy of the Filing Receipt.

Applicants respectfully request issuance of a Corrected Filing Receipt in compliance with the Preliminary Amendment and Application Data Sheet as filed.

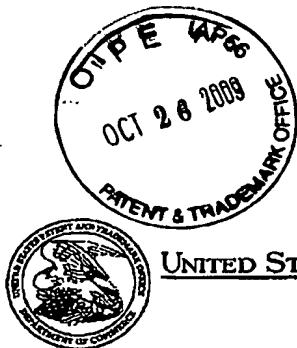
Issuance of a Corrected Filing Receipt to reflect the items as mentioned above is respectfully requested.

Respectfully submitted,



Martin D. Moynihan
Registration No. 40,338

Date: October 22, 2009



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
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APPL NO.	FILING OR 371 (c) DATE	ART UNIT	FIL FEE REC'D	ATTY.DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/561,124	06/15/2006	3738	1240	110/04969	42	51	4

CONFIRMATION NO. 6535

44909
 WOLF, BLOCK, SCHORR & SOLIS-COHEN LLP
 250 PARK AVENUE
 NEW YORK, NY 10177

FILING RECEIPT



OC000000020112721

Date Mailed: 08/22/2006

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Modechay Beyar, Caesarea, ISRAEL;
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Assignment For Published Patent Application

Disc-o-tech, Ltd., Herzlia Pituach, ISRAEL

Power of Attorney: The patent practitioners associated with Customer Number 44909.Domestic Priority data as claimed by applicant PCT/IL2004/000527

This application is a 371 of PCT/IL04/00527 06/17/2004
 which claims benefit of 60/478,841 06/17/2003

→ and claims benefit of 60/529,612 12/16/2003
 and claims benefit of 60/534,377 01/06/2004
 and claims benefit of 60/554,558 03/18/2004
 and is a CIP of 09/890,172 07/25/2001
 and is a CIP of 09/890,318 07/25/2001 PAT 7,097,648

Foreign Applications

If Required, Foreign Filing License Granted: 08/18/2006

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is US10/561,124

→ ISRAEL 160987 03/21/2004

Projected Publication Date: 11/30/2006

Non-Publication Request: No

Early Publication Request: No

**** SMALL ENTITY ****

Title

Deformable tools and implants

Preliminary Class

623

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

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date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

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NOT GRANTED

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110/04969 A01



10/561124

14 DEC 2005

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Mordechay BEYAR et al.
5 Serial Number: TO BE ASSIGNED
Filed: 17 June 2004 as PCT/IL2004/000527 and Herewith as
U.S. National Stage
For: DEFORMABLE TOOLS AND IMPLANTS
Art Unit: TO BE ASSIGNED
10 Examiner: TO BE ASSIGNED

COPY

15 Honorable Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PRELIMINARY AMENDMENT

20 Sir:
Further to the concurrent filing of the U.S. national stage of PCT Application No. PCT/IL2004/000527, kindly amend the application as indicated in the following pages prior to examination.

IN THE SPECIFICATION

Kindly replace the "Related Applications" section on page 1, immediately after the title with the following:

5

-- RELATED APPLICATIONS

The present application is a US National Phase of PCT Application No. IL2004/000527 filed on June 17, 2004 and published as WO2004/110300 which claims claimed the benefit under 35 USC 119(e) of US Provisional Applications for Patent No. 60/478,841 filed on June 10 17, 2003, No. 60/529,612 filed on December 16, 2003, No. 60/534,377 filed January 6, 2004 and No 60/554,558 March 18, 2004, the disclosures of which are incorporated herein by reference.

The present application is a continuation-in-part of US 09/890,172 and US 09/890,318, the disclosures of which are incorporated herein by reference.

15 The present application claims priority from Israel application IL 160987, filed 21 March, 2004, the disclosure of which is incorporated wherein by reference.--

IN THE CLAIMS

1. (Original) A medical grade deformer, comprising:
an axial member; and
- 5 a pliable tube mounted on said axial member and adapted to be deformed from a first, narrower diameter, configuration to a second, greater diameter, configuration.
2. (Original) A deformer according to claim 1, wherein said tube is slotted through its thickness.
- 10 3. (Original) A deformer according to claim 1, wherein said tube is not slotted.
4. (Original) A deformer according to claim 1, comprising at least one end engaging one end of said tube and adapted to apply compressive force to said tube for achieving said deformation.
- 15 5. (Original) A deformer according to claim 4, comprising at least a second end one end engaging a second end of said tube and adapted to cooperate with said first end to compress said tube.
- 20 6. (Original) A deformer according to claim 5, wherein said two engaging ends and said axial member lock to maintain said pliable tube in a greater diameter configuration.
7. (Original) A deformer according to claim 1, wherein said tube changes configuration by axial compression thereof.
- 25 8. (Original) A deformer according to claim 1, wherein said axial member is rigid.
9. (Original) A deformer according to claim 1, wherein said axial member is flexible.
- 30 10. (Original) A deformer according to claim 1, wherein said axial member extends out of said tube and is attached to a handle.

11. (Original) A deformor according to claim 1, wherein said axial member comprises a release mechanism for release of said deformor from a delivery system.
12. (Original) A deformor according to claim 11, wherein said axial member comprises a locking mechanism for locking of said deformor in a greater diameter configuration in conjunction with release.
13. (Original) A deformor according to claim 1, wherein said deformor includes a channel adapted for bone filler flow.
14. (Original) A deformor according to claim 13, wherein said channel is formed in said axial member.
15. (Original) A deformor according to claim 13, wherein said channel is formed between said axial member and said tube.
16. (Original) A deformor according to claim 1, wherein said axial member extends from said tube and is adapted to function as a hinge of a joint.
17. (Original) A deformor according to claim 1, wherein said deformor forms a bone attachment unit for a prosthesis.
18. (Original) A deformor according to claim 1, comprising an enclosing bag, which surrounds said tube in said second configuration.
19. (Original) A deformor according to claim 18, wherein said bag is bio-degradable in the body.
20. (Original) A deformor according to claim 18, wherein said bag is porous.
21. (Original) A deformor according to claim 1, wherein said deformor defines a general volume in the shape of a cylinder when in said second configuration.

22. (Original) A deformers according to claim 1, wherein said deformers defines a general volume in the shape of a truncated pyramid when in said second configuration.
23. (Original) A deformers according to claim 1, wherein said deformers defines an axially 5 rotationally asymmetric general volume when in said second configuration.
24. (Original) A deformers according to claim 1, wherein said deformers defines a predetermined general volume when in said second configuration.
- 10 25. (Original) A deformers according to claim 1, wherein said deformers comprises a set of axially contiguous zones with different material properties.
26. (Original) A deformers according to claim 1, wherein said deformers has a non-smooth outer surface in said second configuration.
- 15 27. (Original) A deformers according to claim 1, wherein said deformers is stiff enough, when in said second configuration to resist a trans-axial force of at least 50Kg.
28. (Original) A deformers according to claim 1, wherein said deformers, when in said 20 second configuration has an axial applied force of at least 2Kg.
29. (Original) A deformers according to claim 1, wherein said pliable material has a shore hardness of between 50A and 90D.
- 25 30. (Original) A deformers according to claim 1, wherein said pliable material is non-metallic.
31. (Original) A deformers according to claim 1, wherein said pliable material is polymeric.
- 30 32. (Original) A deformers according to claim 1, wherein said deformers includes at least one axial thread.
33. (Original) A deformers according to claim 1, wherein said deformers includes at least one circumferential thread.

34. (Original) A deformor according to claim 1, wherein said deformor, in said second configuration, defines a general volume and wherein said deformor fills at least 30% of said volume.

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35. (Original) A deformor according to claim 1, wherein said deformor, in said second configuration, defines a general volume and wherein said deformor fills at least 50% of said volume.

10 36. (Original) A deformor according to claim 1, wherein said tube defines a plurality of slots, such that when deformed to the second configuration, a plurality of axially displaced leaves extend from said tube to define said second configuration.

15 37. (Original) A deformor according to claim 36, wherein said tube defines at least three axially displaced leaves.

38. (Original) A deformor according to claim 36, wherein adjacent leaves support each other, in said second configurations.

20 39. (Original) A deformor according to claim 36, wherein an end leaf is shorter than a non-end leaf.

40. (Original) A deformor according to claim 36, wherein an end leaf is supported, on one side thereof, by an end cap of said deformor.

25

41. (Original) A deformor according to claim 36, wherein adjacent leaves deform each other.

30 42. (Original) A deformor according to claim 36, wherein at least 50% of the leaves are deformed from a plane.

43. (Original) A deformor, comprising a non-inflatable substantially non-absorbent deformable non-metallic body having two configurations, a first configuration in which said body has a narrower diameter and a second configuration in which said narrower diameter is

greater, wherein said deformor is adapted to remain substantially undeformed under a force of over 10 Kg and wherein said deformor is sized for positioning inside a human vertebra.

44. (Original) A deformor according to claim 43, wherein said deformor is adapted to 5 remain substantially undeformed when in a human lumbar vertebra in standing condition.

45. (Original) A deformor according to claim 43, wherein said deformor is self-expanding.

46. (Original) A deformor according to claim 43, as part of kit including a spinal access 10 tool.

47. (Original) A method of spinal surgery, comprising:
inserting a non-inflatable non-absorbent deformable deformor into a vertebra; and
deforming said deformor such that cortical bone of vertebral faces of said vertebra,
15 move relative to each other.

48. (Original) A method of treating a bone, comprising:
inserting a unsealed pliable element into the bone; and
mechanically deforming the pliable element such that said pliable element applies
20 deforming force on the bone.

49. (Original) A method according to claim 48, wherein said pliable element comprises at least one open aperture of cross-section greater than 0.5x0.5 mm.

25 50. (Original) A method according to claim 48, wherein said bone comprises a vertebral bone.

51. (Original) A method according to claim 48, wherein said bone comprises a long bone.

30 52-61. (Cancelled)

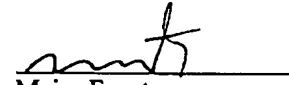
REMARKS

Claims 1 to 51 are presented as originally filed in PCT/IL2004/000527. Please cancel claims
5 52 through 61 without prejudice reserving the right to file a divisional application in due
course.

An action on the merits is respectfully awaited.

10

Respectfully submitted,
Mordechay Beyar et al.



Maier Fenster
Reg. No. 41,016

15

December 14, 2005
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10/561124

IAP20 Rec'd PCT/PTO 14 DEC 2005

Application Data Sheet

COPY

Application Information

Application number::	Not yet assigned
Filing Date::	Herewith
Application Type::	Regular
Subject Matter::	Utility
CD-ROM or CD-R?::	None
Title::	Deformable Tools and Implants
Attorney Docket Number::	110/04969
Request for Early Publication?::	No
Request for Non-Publication?::	No
Suggested Drawing Figure::	1F
Total Drawing Sheets::	42
Small Entity?::	Yes

Applicant Information

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Correspondence Information

Correspondence Customer Number :: 44909

Representative Information

Representative Customer Number::	44909	
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Domestic Priority Information

Application ::	Continuity Type::	Parent Application::	Parent Filing Date::
This application	National Stage of	PCT/IL2004/000527	06/17/04
PCT/IL2004/000527	An application claiming the benefit under 35 USC 119(e)	60/478,841	06/17/03
PCT/IL2004/000527	An application claiming the benefit under 35 USC 119(e)	60/529,612	12/16/03
PCT/IL2004/000527	An application claiming the benefit under 35 USC 119(e)	60/534,377	01/06/04
PCT/IL2004/000527	An application claiming the benefit under 35 USC 119(e)	60/554,558	03/18/04
PCT/IL2004/000527	Continuation-in-part of	USSN 09/890,172	07/25/01
PCT/IL2004/000527	Continuation-in-part of	USSN 09/890,318	07/25/01

Foreign Priority Information

Country::	Application	Filing Date::	Priority
------------------	--------------------	----------------------	-----------------

	number::		Claimed::
ISRAEL	160987	03/21/04	Yes

Assignee Information

Assignee name:: Disc Orthopaedic Technologies, Inc.
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